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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/811,195

03/26/2004

John Kenneth Stacy

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EXAMINER

LEE, CHI HO A

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

07/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,195

Applicant(s)

STACY ET AL.

Examiner

Andrew Lee

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 7 and 14-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 9-13, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viswanath et al U.S. Patent Number 6,950,434 in view of Milliken PG-PUB 2003/0115485 A1.

Re Claims 1, 9-13, 17-19, Viswanath et al teaches in fig. 3, receiving a data packet at a node (Step 70); performing hash-based flow classification on the receive packet based on the search of signature table (steps 74-78) (See col. 7, lines 5 +). Viswanath fails to explicitly teach determining whether the received packet is a malicious packet and discarding accordingly. However, Milliken teaches in fig. 5, determining whether the receive packet is a malicious packet by hashing function and if YES, discarding the packet. One skilled in the art would have been motivated by Milliken to discard malicious packet to minimize buffer space and for security. Therefore, it would have been obvious to one ordinary skilled to combine the references.

Re Claim 2, refer to Claim 1, wherein the a packet type is identified and extracted information is compared signature table (a searching hash table).

Re Claim 3, refer to Claim 1, wherein Milliken teaches determine a malicious packet.

Re Claim 4, refer to Claim 1, wherein hashing is flow based classification.

3. Claims 5, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viswanath et al U.S. Patent Number 6,950,434 in view of Milliken PG-PUB 2003/0115485 A1 as applied to claim 4 above and further in view of U.S. Patent Number 6,522,188.

Re Claims 5, 8, Viswanath in view of Milliken fails to explicitly teach "removing buffer pointers....storing the removed buffer pointers on a queue of free buffer pointers.". However, 188' patent teaches QM descriptor SRAM that organized into a buffer descriptor table that are used to indicate free buffer for storing. Hence, if the packet is deemed malicious packet, the queue allocated for receiving the packet are re-assigned as being free for usage. One skilled would have been motivated to do so to conserve buffer space. Therefore, it would have been obvious to one ordinary skilled to combine the references.

Allowable Subject Matter

4. Claims 7, 14, and 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

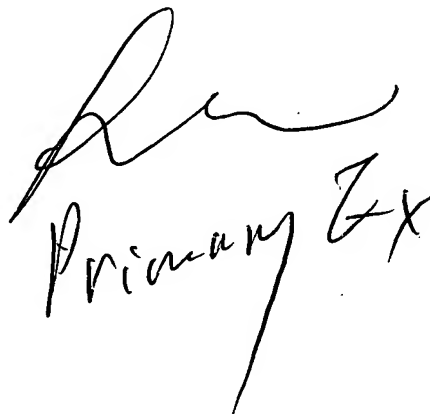
The following is a statement of reasons for the indication of allowable subject matter:

In combination 1, 4-7; and 11, 13 and 14, prior art fails to storing the set of descriptors associated with the received data packet on a delete queue until enough entries becomes available in the queue of free buffer pointers.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 571-272-3130. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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